

## REMARKS

The undersigned attorney is grateful to the Examiner for the detailed and helpful Office Action.

Claims 11-13 are in the case.

In an Office Action dated January 29, 2004, the following requirements and objections to the specification and drawings were made: A new title is required; the abstract is objected to; drawing corrections are required; corrections to the specification are to be made and claim 11 should be amended as set forth in the Office Action.

In the same Office Action claims 11-13 were rejected. Claims 11 and 12 stand rejected under 35 U.S.C. 103(a) as being obvious in light of the applicant's stated prior art in view of Buch. Claim 13 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Buch in view of Chiang et al. These objections and rejections are respectfully traversed and reconsideration is requested in light of the amendments above and the arguments below.

The Title, Abstract, specification and drawings have been amended as suggested in the Office Action by the above amendment except for the following: On page 5 of the Office Action, in the fifth full paragraph, it is stated that "On pages 19-22, it appears the reference numerals 340, 350 and 410-430 shown in Figure 4 should be described or discussed, at least briefly, for

clarity and completeness." The descriptions for these elements present in the specification are believed to be readily understood by those skilled in the art and no further description is necessary.

With respect to the suggested amendments to claim 11, the paragraph beginning in line 22 of claim 11 states:

C) wherein said self-locking memory circuit has upper and lower voltage thresholds that cause said self-locking memory circuit to change states when a level of voltage applied to said self-locking memory circuit passes through one of said thresholds.

The "upper and lower voltage thresholds" are elements of the claim. In light of *Festo Corporation v. Shotetsu Kinzoku Kogyo Kabushiki Co., Ltd.*, 68 USPQ2d 1321 (CAFC 2003), such combining of paragraphs of a claim may cause problems when enforcing the patent. The separation of the elements into paragraphs provides clearer identification of the elements of the claim, which is important in cases in which *Festo* is applicable. Therefore, the changes suggested to claim 11 have not been made.

With respect to the rejection of claim 11 under 35 U.S.C. 103(a) it is not obvious that the combination of the applicant's admitted prior art in view of Buch would lead one to the present invention.

The arguments in the following paragraph were made in the previous amendment, but have not, it is believed, been addressed by the Examiner.

The hold circuit of Buch and of Figure 2 of the present invention is more susceptible to noise when it is holding the data on the data lines by itself. That is because the effective output impedance of the circuit 220 is higher than for the amplifiers and gates driving the data lines. For example, if a data line is at a logical 0 (zero voltage) and at some time an amplifier or gate tries to drive the data line to a logical one (a high voltage such as 5 volts), the resistor 12 must be large enough so that a sufficient voltage is generated across the resistor when the data line is being driven by the amplifier or gate to provide a high enough voltage to guarantee that the amplifier 10 will switch from a logical zero output to a logical one output. Thus, there is a lower limit to resistance of resistor 12, and the combination of the amplifier 10 and resistor 12 provides an effectively higher output impedance than an amplifier or gate by itself. If the noise gets too high, the hold circuit will not be able to hold the data lines at a zero or one logic level, while amplifiers and gates driving the data lines, because of their lower effective output impedance, would be able to hold the logic level constant. It is not obvious that the threshold level of noise generated in a passenger railway car is below this threshold level.

The Examiner stated on page 10 of the present Office Action the following;

One of ordinary skill in the art would recognize that the 'thresholds' of a self-locking memory or hold circuit may be adjusted so that the self-locking bus hold circuit changes states at desired voltage levels so that desired amounts of electrical noise on the data bus will not cause the self-locking bus hold circuit and data bus to change states. The mere adjustment of the resistance value to protect from different levels of noise would have been obvious to those of ordinary skill in the art.

The Examiner's position is directly opposite to the Applicant's position as stated in the previous paragraph. Again, the Examiner has not addressed the statements made in the previous paragraph.

Since the Examiner is relying on his own personal knowledge as to what is obvious to one having ordinary skill in the art as to the whether a latch circuit of the present invention can be used in the noisy environment of a passenger transit car, the Examiner is respectfully requested to provide an affidavit of such knowledge.

Section 2144.03, subsection C, first paragraph, of the MPEP states *inter alia*:

If applicant adequately traverses the examiner's assertion of official notice, the examiner must provide documentary evidence in the next Office action if the rejection is to be maintained. See 37 CFR 1.104(c)(2). See also Zurko, 258 F.3d at 1386, 59 USPQ2d at 1697 ("[T]he Board [or examiner] must point to some concrete evidence in the record in support of these findings" to satisfy the substantial evidence test). If the examiner is relying on personal knowledge to support the finding of what is known in the art, the examiner must provide an affidavit or declaration setting forth specific

factual statements and explanation to support the finding. See 37 CFR 1.104(d)(2).

If, at any time, the Examiner in charge of this application feels that prosecution of this application could be expedited through a telephone interview, the Examiner is invited to contact the undersigned by telephone at (412) 380-0725.

Respectfully Submitted,

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